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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,682	07/21/2003	Joseph A. King	5783	5313

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EXAMINER

TSOY, ELENA

ART UNIT PAPER NUMBER

1762

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/623,682

Applicant(s)

KING ET AL.

Examiner

Elena Tsoy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8-20 is/are pending in the application.
- 4a) Of the above claim(s) 11 and 13-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-10 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 23, 2005 has been entered.

Claims 8-20 are pending in the application. Claims 11, 13-20 are withdrawn from consideration as directed to a non-elected invention.

***Terminal Disclaimer***

2. The terminal disclaimer filed on March 21, 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,446,814 has been reviewed and is accepted. The terminal disclaimer has been recorded.

***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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4. Rejection of claims 8, 9 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 5, 7, 8 of U.S. Patent No. 6,446,814 has been withdrawn due to timely filed terminal disclaimer.
5. Rejection of claims 10, 12 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 5, 7, 8 of U.S. Patent No. 6,446,814 in view of Rosenblatt (US 6,365,169) has been withdrawn due to timely filed terminal disclaimer.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8, 9 are rejected under 35 U.S.C. 102(b) as being anticipated by KR 8902848 and Minami (US 3,866,568) or Takahashi et al (US 5,567,539).

KR 8902848 discloses a method of making a sterilizing and water-cleaning filter comprising applying an adhesive to permeable nonwoven fabric (claimed web of material); applying a silver treated activated carbon (claimed metal ion yielding material in particle form) to

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the adhesive on the web; and fusion-bonding the adhesive to the activated carbon to fix the activated carbon to the web (See Translation, page 4, lines 20-21).

It is the Examiner's position that that the fused adhesive is dried *inherently*, since it is well known in the art that fusible or hot melt adhesive is dried (becomes non-tacky) after fusion to provide strong bondage to a substrate, as evidenced by Minami (See column 1, lines 14-18; column 2, lines 6-8; column 4, lines 26-27) and Takahashi et al (See column 20, lines 15-22).

9. Claims 8-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 780100390.

JP 780100390 discloses sterilizing element for water purification vessel comprising coating a substrate with a resin adhesive agent, applying a water-insoluble silver salt (claimed particle form) on the adhesive agent, then curing (claimed setting) the adhesive to adhere the silver salt to the substrate (See Abstract).

It is the Examiner's position that "curing" involves "drying" whether the adhesive is hot-melt adhesive, as evidenced by JP 51067462 (See Abstract), or solvent based.

Even if it could be argued that curing does not include drying in JP 780100390, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used solvent-based curable adhesive so that curing would involve drying.

As to claim 10, it is well known in the art that AgCl is used as a water-insoluble silver salt in water purification systems.

10. Claims 8, 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 78020780.

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JP 78020780 discloses a sterilizing element for water purification apparatus (claimed filter) comprising adhering a water-insoluble silver salt containing powder to a flexible film with a epoxy resin binder (See Abstract).

It is the Examiner's position that "adhering" involves "drying" whether the adhesive is hot-melt adhesive, or solvent based.

Even if it could be argued that curing does not include drying in JP 780100390, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used solvent based curable adhesive so that adhering would involve drying.

11. Claims 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over KR 8902848 in view of Oehler et al (US 5,820,927).

KR 8902848 does not expressly show that solvent-based adhesives may be used in making water filters so that securing activated carbon to substrate surface involves drying the adhesive after applying the activated carbon.

Oehler et al teach that a solution of adhesive such as ethylene vinyl acetate (See column 4, lines 19-20) may be used in making water filters so that securing activated carbon to substrate surface involves drying the adhesive after applying the activated carbon (See column 4, lines 39-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a solution of adhesive such as ethylene vinyl acetate in KR 8902848 instead of hot melt adhesive with the expectation of providing the desired securing of the activated carbon, as taught by Oehler et al.

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12. Claims 8-10, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over KR 8902848/JP 780100390/JP 78020780 in view of Rosenblatt (US 6,365,169).

KR 8902848 and Minami or Takahashi et al JP 780100390/JP 78020780 are applied here for the same reasons as above. KR 8902848 JP 780100390/JP 78020780 fails to teach that the adhesive is polyvinyl acetate (PVA) (Claim 10) and is applied by spraying (Claim 12).

Rosenblatt teaches that PVA adhesives together with iodine and other antimicrobial components (See column 6, lines 36-44) can be used in making water filters and can be applied by spraying (See column 8, lines 1-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used PVA as an adhesive in KR 8902848 and Minami or Takahashi et al together with iodine and applied by spraying since Rosenblatt teaches that PVA adhesives together with iodine and other antimicrobial components can be used in making water filters and can be applied by spraying.

It is the Examiner's position that placement of the filter of KR 8902848 and Minami or Takahashi et al in view of Rosenblatt into a body of water would enable the structure to adhesively support the water treatment material thereon in a condition that maintains a water concentration of metal ions less than 1000 parts per billion (ppb) since it is produced by a method identical or substantially identical processes to that of claimed invention.

13. Claim 10 is rejected under 35 U.S.C. 102(b) as anticipated by JP 78020780.

JP 78020780 discloses a sterilising element for water purification apparatus (claimed article) comprising adhering (claimed allowing the resin to set) a water-insoluble silver chloride containing powder to a flexible film with a epoxy resin binder (See Abstract).

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***Response to Arguments***

14. Applicant's arguments with respect to claims 8-10, 12 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is (571) 272-1429. The examiner can normally be reached on Mo-Thur. 9:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-141523. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**ELENA TSOY  
PRIMARY EXAMINER**  
*ETsoy*

Elena Tsoy  
Primary Examiner  
Art Unit 1762

June 23, 2005